

scribes the organic forms and processes as products of an historical development. . . . This historical point of view also represents a non-physical principle which forces itself upon us in the organic realm. . . . For even a complete physico-chemical description of the organic processes would not . . . render the organismic and historical points of view superfluous.'

Bertalanffy is by no means content with the self-denying ordinance which rules out from science all attempts at explanation. Somewhat surprisingly he goes on to say in a later chapter: ^f For the scientist the only question is what principles of explanation are necessary and sufficient for vital processes ; in other words, whether the hypotheses and laws of physics suffice in principle for the explanation of biological facts. . . . If a "non-mechanist " wishes to deny the assumption of methodo-logical mechanism that biological explanations must also be physico-chemical ones, it is obviously by no means intended that the required explanation must be "vitalistic^{3j}, i. e., involving the assumption that in living organisms factors analogous to psychical ones are "at work ". A " non-mechanical " theory which is not at all " vitalistic " thus appears to be logically possible.'

We are thus led to expect from Bertalanffy ^c a satisfactory theory of the organism, which we shall call the "organismic" or "system" theory'. And this theory is to be explanatory, not merely descriptive; for this organization of the processes . . . is not a vitalistic

hypothesis nor an apparent problem, but a
simple fact
which gives us the right and lays upon us
the duty of
seeking an explanation for it'. He asserts that
* if we
investigate vital processes physically and
chemically we
shall never reach a process which runs
contrary to the